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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/922,948 | 08/07/2001 | Stefan Wigger | 33713W003 | 9507 |
| 7590 12/18/2003 | | | EXAMINER | |
| SMITH, GAMBRELL & RUSSELL, LLP ATTORNEYS AT LAW SUITE 800 1850 M STREET, N.W. WASHINGTON, DC 20036 | | | WILKINS III, HARRY D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1742 | |
| DATE MAILED: 12/18/2003 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,948

Applicant(s)

WIGGER ET AL.

Examiner

Harry D Wilkins, III

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7-9,11-16,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7-9,11-16,19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirooka et al (US 5,330,813).

Claims 14-16 are rejected for the same reasons as stated in paragraph no 3 of the previous Office Action.

Regarding new claim 20, Hirooka et al teach carburizing a surface (see col 7, lines 10-12) by first preventing carburization on a portion of the surface by applying a patch of a material containing (col 3, lines 32-34) a particulate material (e.g.-borax, boron oxide, borosilicic acid, phenylboric acid and water glass) and (col 3, lines 53-54) adjuvant materials (e.g.-talc). Hirooka et al contain several examples where the ratio of the particulate material to the adjuvant is 9:1 (see examples 2 and 5), 4.5:1 (example 7) and 13:1 (example 8). It would have been within the expected skill of a routineer in the art to have selected a substance which forms boron glass (e.g. boron oxide and borax) as the particulate material and to have selected a magnesium-silicon compound (e.g.-talc) as the adjuvant in order to obtain the best anti-carburizing coating with the best ability to stay in place (the function of the adjuvant).

3. Claims 1, 3, 5, 7-9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirooka et al (US 5,330,813) in view of Milaniak et al (US 5,366,765).

Claims 1, 3, 4, 7-9 and 11-13 are rejected for the same reasons as stated in paragraph no 4 of the previous Office Action.

Regarding new claim 19, Hirooka et al teach talc as one of the possible adjuvants. It would have been within the expected skill of a routineer in the art to have selected talc from the list of adjuvants in order to optimize the ability of the composition to stay in place during carburizing (i.e.-the function of the adjuvant).

Response to Arguments

4. Applicant's arguments filed 13 October 2003 have been fully considered but they are not persuasive. Applicant has argued that:

- a. None of the specific examples of Hirooka et al teach using talc and that the large list of possible adjuvants does not lead a person skilled in the art to select a magnesium silicate;
- b. Hirooka et al reference talc without mentioning any percentages or proportions;
- c. Hirooka et al do not disclose using a paste-like or lacquer-like material;
- d. Hirooka et al are not concerned with the same problems as the present application;
- e. There is no motivation to combine the slurry coating of Milaniak et al with the composition of Hirooka et al; and,

f. Hirooka et al does not teach the paste-like of lacquer-like composition with regards to method claims 14-16 and 20.

In response to Applicant's first argument, the Examiner agrees that Hirooka et al do not teach a specific example using talc. However, (1) the scope of the prior art should not be construed as being limited to only the specific examples contained therein and (2) that is the reason why the rejection is an obviousness rejection, not an anticipation rejection. Hirooka et al suggest using talc among a list of elements. Thus, one of ordinary skill in the art would have been led to try out talc as the adjuvant. Therefore, a *prima facie* case of obviousness exists.

In response to Applicant's second argument, while Hirooka et al do not mention any percentages/proportions dealing specifically with talc, one of ordinary skill in the art would have expected quantities of talc similar to the quantities of other adjuvants would have been used.

In response to Applicant's third argument, it has been agreed that Hirooka et al do not teach the "paste, semi-liquid or liquid" means for applying the material. However, these are considered to be functional equivalents (as taught by Milaniak et al) to the solid patch technique disclosed by Hirooka et al.

In response to Applicant's fourth argument, the Examiner believes that Hirooka et al are addressing the same problem as the present invention. Particularly Hirooka et al, at col. 3, lines 43-47, teach that by adding the adjuvant, the risk of the material running (i.e.-flowing) upon melting is reduced, which is exactly the same problem addressed by Applicant.

In response to Applicant's fifth argument, as per MPEP 2144.06, no express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. The disclosure of Milaniak shows that a solid patch and a slurry (semi-liquid) means for applying a powder to a metallic surface were known to be functional equivalents.

In response to Applicant's sixth argument, it is noted that method claims 14-16 and 20 do not recite the paste-like or lacquer-like limitations, nor the "paste, semi-liquid or liquid" of claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The purported superior qualities of the present invention have not compared the present invention with the closest prior art. The only comparisons provided are for compositions that lack an "adjuvant" (as defined by Hirooka et al). The closest prior art is Hirooka et al, which teaches the combination of the boron glass forming compound with an adjuvant that helps to keep the boron glass in place after melting. Applicant should demonstrate that using a magnesium-silicon compound (e.g., -talc) provides better results than those of the other adjuvants disclosed by Hirooka et al.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D Wilkins, III whose telephone number is 703-305-9927. The examiner can normally be reached on M-Th 10:00am-8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Harry D Wilkins, III
Examiner
Art Unit 1742

hdw
December 11, 2003

ROY KING
SUPERVISOR
TECHNOLOGY CENTER 1700
EXAMINER